

## SPECIFICATION AMENDMENTS:

[0012] In one embodiment each of the wicket gates has a top gate portion that extends between the inner and outer edge portions of the wicket gate. Each of the wicket gates pivots about trunnions that extend vertically within the distributor across the flow mouth. The inner edge portion of the wicket gate slopes forward from the top gate portion to the bottom gate portion and outwardly from the top gate portion to the bottom gate portion. This permits the inner edge portion to overlie an adjacent wicket gate when in the closed position while at the same time permitting for a concavely recessed portion that does not extend beyond the distributor when the wicket gate is in the open position.

[0029] The plan views of Figures 2A and 2B show the wicket gates 28 in an open position. Referring to Figures 2A, 2B and 3, the wicket gates 28 have an inner or trailing downstream edge portion 30 and an outer or upstream leading edge portion 32. The inner edge portion 30 is more elongated than the outer edge portion 32 which is somewhat rounded. Movement of the wicket gates 28 is about trunnions 34 mounted into the distributor opposing lips 17, 19. The outer edge portion 32 of the wicket gate 28 sweeps over the upper and lower stay ring portions 22 to define sweep areas 40 adjacent the upper and lower stay ring portions 22, 24. It should be understood that sweep areas 40 in the upper and lower stay ring portions 22, 24 may not be the same size or shape because the wicket gates 28 may not have the same shape at the top and bottom of the gates. Each of the wicket gates 28 has a lower gate portion 44 that extends from the outer edge portion 32 to the inner edge portion 30. Further, each of the wicket gates 28 has an upper gate portion 46 that also extends from the outer edge portion 32 to the inner edge portion 30.

[0032] In accordance with another aspect as best seen in Figures 3 and 6, the inner edge portion 30 of the wicket gate 28 has a concavely recessed portion

70 adjacent the lower gate portion 44. The concavely recessed portion 70 does not extend beyond the distributor 16 in to the turbine 10 when the wicket gate 28 is in its open position so as to reduce shear forces adjacent and downstream of the wicket gates 28. Each of the wicket gates 28 pivot about the trunnions that extend vertically along axis 100 within the distributor 16 and the inner edge portion 30 has a surface 102 that slopes forward from the upper gate portion 46 to the lower gate portion 44. The inner edge portion 30 also slopes forward from the upper gate portion 46 to the lower gate portion 44 and outwardly of the distributor from the upper gate portion 46 to the lower gate portion 42. This sloping surface 102 permits for the wicket gates 28 to be mounted on their trunnions 34 further out from the center of the distributor lips. This allows the inner edge portions 30 of the wicket gates 28 to overlap with the outer edge portions 32 of adjacent wicket gates 28 and effectively provide a barrier to water flow when the wicket gates 28 are in the closed position. The sloping surface 102 thereby compensates for the recessed concave surface area 70 which would otherwise provide a gap permitting for water to flow past the wicket gates 28 and into the turbine even when the wicket gates 28 were in the closed position.